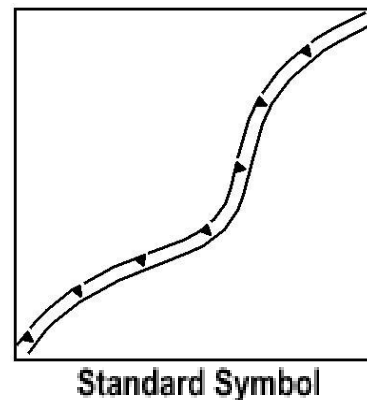


SC-10 SEDIMENT TRAP

Refer to: ITD Standard Specifications, Section 212.
ITD Standard Drawings P-1-C, P-1-D, and P-4-A.



Definition and Purpose

A sediment trap is a temporary containment area that allows sediment in collected stormwater to settle out during infiltration or before the runoff is discharged through a stabilized spillway. Sediment traps are formed by excavating or constructing an earthen embankment across a waterway or low drainage area.

Appropriate Applications

- Sediment traps may be used on construction projects where the drainage area is less than 5 acres. Traps should be placed where sediment-laden storm water enters a storm drain or watercourse.
- This BMP may be implemented on a project-by-project basis with other BMPs when determined necessary and feasible by the Engineer.
- As a supplemental control, sediment traps provide additional protection for a water body or for reducing sediment before it enters a drainage system.

BMP Objectives	
<input checked="" type="checkbox"/>	Perimeter Control
<input type="checkbox"/>	Slope Protection
<input type="checkbox"/>	Borrow and Stockpiles
<input checked="" type="checkbox"/>	Drainage Areas
<input checked="" type="checkbox"/>	Sediment Trapping
<input checked="" type="checkbox"/>	Stream Protection
<input type="checkbox"/>	Temporary Stabilizing
<input type="checkbox"/>	Permanent Stabilizing

Limitations

- Requires large surface areas to permit infiltration and settling of sediment.
- Not appropriate for drainage areas greater than 5 acres.
- Only removes large and medium sized particles and requires upstream erosion control.
- Attractive and dangerous to children, requiring protective fencing.
- Not to be located in live streams.
- Size may be limited by availability of right-of-way.

Design Parameters

- Sediment traps shall be constructed prior to the rainy season and construction activities.
- Trap shall be situated according to the following criteria: (1) by excavating a suitable area or where a low embankment can be constructed across a swale, (2) where failure would not cause loss of life or property damage, and (3) to provide access for maintenance, including sediment removal and sediment stockpiling in a protected area.
- Trap shall be sized to accommodate a settling zone and sediment storage zone with recommended minimum volumes of 67 and 33 cubic yards per acre of contributing drainage area, respectively, 0.5 inch of runoff volume over a 24-hour period. Multiple traps and/or additional volume may be required to accommodate site-specific rainfall and soil conditions.
- Traps with an impounding levee greater than 5 feet tall, measured from the lowest point to the impounding area to the highest point of the levee, and traps capable of impounding more than 35,300 cubic feet, shall be designed by a professional Civil Engineer registered with the state of Idaho. The design must be submitted to the Engineer for approval at least 7 days prior to the basin construction. The design shall include maintenance requirements, including sediment and vegetation removal, to ensure continuous function of the trap outlet and bypass structures.
- Areas under embankments, structural works, and sediment traps shall be cleared and stripped of vegetation.
- Rock or vegetation shall be used to protect the trap outlets against erosion.
- Fencing shall be provided to prevent unauthorized entry.

Maintenance and Inspection

- Conduct inspections as required by the NPDES permit or contract specifications.
- If captured stormwater has not completely infiltrated within 72 hours, then dewater the sediment trap.
- Repair damage and remove obstructions as needed or as directed by the Engineer.
- Remove accumulated sediment when the volume has reached one-third the original trap volume.
- Properly dispose of sediment and debris removed from the trap.